

Substitute for Form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known

Application Number	10/611,379
Filing Date	06/30/2003
First Named Inventor:	Buxton, et al.
Art Unit	2193
Examiner Name	Malzahn, David H.
Attorney Docket Number	42P15761

Sheet 1

of

8

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)				
/DHM/		US-	4,841,468	06-1989	Miller et al.	
/DHM/		US-	4,982,352	01-1991	Taylor et al.	
/DHM/			5,781,457	07-1998	Cohen et al.	
/DHM/		US-	5,969,975	10-1999	Glass et al.	
/DHM/			6,115,812 A	09-05-2000	Abdallah et al.	
/DHM/		US-	6,167,419	12-2000	Saishi et al.	
/DHM/		US-	6,167,420	12-2000	Saishi et al.	
/DHM/			6,211,892 B1	04-03-2001	Huff et al.	
/DHM/			6,370,559	04-2002	Hoffman	
/DHM/			6,430,684	08-2002	Bosshart	
/DHM/		US-	6,457,036	09-2002	Sloan	
/DHM/			6,745,319 B1	06-01-2004	Balmer et al.	
/DHM/		US-	6,839,728	01-2005	Pitsianis et al.	
/DHM/			2001/0016902 A1	08-23-2001	Abdallah et al.	
/DHM/		US-	2002/0159529	10-2002	Wang et al.	
/DHM/		US-	2002/0172287	11-2002	Kim	
/DHM/		US-	2003/0231711	12-2003	Zhang et al.	
/DHM/		US-	2004/0098556	05-2004	Buxton et al.	
/DHM/		US-	2004/0098567	05-2004	Hansen et al.	
/DHM/		US-	2004/0205323	10-2004	Hansen et al.	
/DHM/		US-	2005/0108312	05-2005	Chen et al.	
/DHM/		US-				

Examiner
Signature

/David Malzahn/

Date Considered

06/26/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/611,379
				Filing Date	06/30/2003
				First Named Inventor:	Buxton, et al.
				Art Unit	2193
				Examiner Name	David H. Malzahn
Sheet	2	of	8	Attorney Docket Number	42P15761
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
/DHM/		AVARO, Olivier, et al., <i>MPEG-4 Systems Overview and Architecture</i> , woody.imag.fr/MPEG4/syssite/syspub/docs/tutorial/, 28/05/98, pp. 1-71 plus Yahoo site ref.			
/DHM/		BIERLING, M., <i>Displacement Estimation by Hierarchical Blockmatching</i> , SPIE, Vol. 1001, Visual Communications and Image Processing, May 1998, pp. 942-951.			
/DHM/		CHAN, Y.L and W.C. Siu, <i>Adaptive Multiple-Candidate Hierarchical Search for Block Matching Algorithm</i> , IEE Electronics Letters, Vol. 31, No. 19, Sept. 14, 1995, pp. 1637-1639.			
/DHM/		CHAN, Yui-Lam and Wan-Chi Siu, <i>New Adaptive Pixel Decimation for Block Motion Vector Estimation</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 6, No. 1, Feb. 1996, pp. 113-118.			
/DHM/		CHEN, Liang-Gee, Wai-Ting Chen, Yeu-Shen Jehng Tzi-Dar Chuieh, <i>An Efficient Parallel Motion Estimation Algorithm for Digital Image Processing</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 1, No. 4, Dec. 1991, pp. 378-384.			
/DHM/		CHENG, K.W., S.C. Chan, <i>Fast Block Matching Algorithms for Motion Estimation</i> , ICASSP96, 1996, pp. 2318ff.			
/DHM/		CORBAL, Jesus, et al., <i>DLP+TLP Processors for the Next Generation of Media Workloads</i> , 0-7695-1019-1/01, IEEE, 2001, pp. 219-228.			
/DHM/		DAY, Neil, Ed., <i>Introduction to MPEG-7 (v.3.0)</i> , International Organization for Standardization, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, #N4032, March 2001, pp. 1-10.			
/DHM/		DIEFENDORFF, Keith, et al. <i>AltiVec Extension to PowerPC Accelerates Media Processing</i> , IEEE Publication No. 0272-1732/00, Copyright 2000 IEEE, pp. 85-95.			
/DHM/		DUFAUX, Frederic, et al., <i>Efficient, Robust, and Fast Global Motion Estimation for Video Coding</i> , 1057-7149/00, IEEE, 2000, pp. 497-501.			
/DHM/		ECKART, Stefan, Chad Fogg, <i>ISO/IEC MPEG-2 Software Video Codec</i> , SPIE Vol. 2419, Digital Video Compression: Algorithms and Technologies, 1995, San Jose, CA.			

Examiner Signature	/David Malzahn/	Date Considered	06/26/2007
--------------------	-----------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known		
				Application Number	10/611,379	
				Filing Date	06/30/2003	
				First Named Inventor:	Buxton, et al.	
				Art Unit	2193	
				Examiner Name	David H. Malzahn	
Sheet	3	of	8	Attorney Docket Number		42P15761
NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				T ²
/DHM/		EDIRISINGHE, E.A., et al., <i>Shape Adaptive Padding for MPEG-4</i> , 0098 3063/00, IEEE, 2000, pp. 514-520.				
/DHM/		FENG, J., Lo, K. T. Mehrpour, H. Karbowski, A.E, <i>Adaptive Block-Matching Motion Estimation Algorithm for Video Coding</i> , IEE Electronics Letters, Vol. 31, No. 18, 1995, pp. 1542-1543.				
/DHM/		FURHT, Botho, Joshua Greenberg, Raymond Westwater, <i>Motion Estimation Algorithm for Video Compression</i> , Kluwer Academic Publishers, Boston, 1997, pp. cover-vi, 11, 49-95.				
/DHM/		GHANBARI, M., <i>The Cross-Search Algorithm for Motion Estimation</i> , IEEE Transactions on Communications, Vol. 38, No.7, Jul. 1990, pp. 950-953.				
/DHM/		HE, Zhongli, M.L. Liou, <i>A High Performance Fast Search Algorithm for Block Matching Motion Estimation</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 7, No. 5, Oct. 1997, pp. 826-828.				
/DHM/		HE, Zhong-Li, M.L. Liou, <i>Design of Fast Motion Estimation Algorithm based on Hardware Consideration</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol.7, No.5, Oct. 1997, pp. 819-823.				
/DHM/		HEISING, G., et al., <i>MoMuSys: MPEG-4 Version 2 Video Reference Software Package</i> , AC098/HHI/WP5.1/DS/P/049/B1, 1998, Abstract and pp. 1-8.				
/DHM/		INTEL CORPORATION, <i>Block-Matching in Motion Estimation Algorithms Using Streaming SIMD Extensions 2 (SSE2)</i> , Vers. 2.0 9/22/00, Order No. 248605-001, pp. 1-13, A-1, A-2.				
/DHM/		INTERNATIONAL ORGANISATION FOR STANDARDISATION, <i>Optimization Model, Version 2.0</i> , ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, #N3675, October 2000, 12 pp.				
/DHM/		INTERNATIONAL ORGANISATION FOR STANDARDISATION, <i>New MPEG-4 Profiles Under Consideration</i> , ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, #N3932, January 2001, pp. 1-35.				
/DHM/		JAIN, J., A. Jain, <i>Displacement Measurement and its Application in Interframe Image Coding</i> , IEEE Transactions on Communications, Vol. 29, No. 12, Dec. 1981, pp. 1799-1808.				

Examiner Signature	/David Malzahn/	Date Considered	06/26/2007
--------------------	-----------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.
If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/611,379
				Filing Date	06/30/2003
				First Named Inventor:	Buxton, et al.
				Art Unit	2193
				Examiner Name	David H. Malzahn
Sheet	4	of	8	Attorney Docket Number	42P15761
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
/DHM/		JU, John C.-H., et al., <i>A Fast Rate-Optimized Motion Estimation Algorithm for Low-Bit-Rate Video Coding</i> , 1051-8215/99, IEEE, 1999, pp. 994-1002.			
/DHM/		JUNG, Hae Mook, Duch Dong Hwang Coong Soo Park, Han Soo Kim, <i>An Annular Search Algorithm for Efficient Motion Estimation</i> , International Picture Coding Symposium, PCS96, 1996, pp. 171-174.			
/DHM/		KAPPAGANTULA, S., K.R. Rao, <i>Motion Compensated Interframe Image Prediction</i> , IEEE Transactions on Communications, 33(9), Sept. 1985, pp. 1011-1015.			
/DHM/		KIM, Joon-Seek, Rae-Hong Park, <i>A Fast Feature-Based Block Matching Algorithm Using Integral Projections</i> , IEEE Journal on Selected areas in communications, Vol.10, No.5, June 1992, pp. 968-971.			
/DHM/		KIM, Michelle, Ed., <i>MPEG-4 Systems</i> , International Organization for Standardization, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, #N3383, June 2000, pp. 1-19.			
/DHM/		KNEIP, Johannes, et al., <i>Applying and Implementing the MPEG-4 Multimedia Standard</i> , 0272-1732/99, IEEE, 1999, pp. 64-74.			
/DHM/		KNEIP, J. (Johannes), et al., <i>The MPEG-4 Video Coding Standard—a VLSI Point of View</i> , IEEE Workshop on Signal Processing Systems (SIPS98), 8-10 Oct. 1998, pp. 43-52, A-1, A-2.			
/DHM/		KOGA, J., et al., <i>Motion Compensated Interframe Coding for Video Conferencing</i> , Proceedings of the National Telecommunications Conference, 1981, pp. G5.3.1-5.3.3.			
/DHM/		KOENEN, Rob, Ed., <i>Overview of the MPEG-4 Standard</i> , International Organization for Standardization, ISO/IEC JTC1/SC29/WG11, Coding of Moving Pictures and Audio, #N4030, March 2001, pp. 1-69.			
/DHM/		KUHN, P., <i>Algorithms, Complexity Analysis and VLSI Architectures for MPEG-4 Motion Estimation</i> , 1999 Kluwer Academic Publishers, Boston, pp. cover-vi, 15, 17-59, 107-109, 119-121, 147-167, and 189-204.			

Examiner Signature	/David Malzahn/	Date Considered	06/26/2007
--------------------	-----------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/611,379
				Filing Date	06/30/2003
				First Named Inventor:	Buxton, et al.
				Art Unit	2193
				Examiner Name	David H. Malzahn
Sheet	5	of	8	Attorney Docket Number	42P15761

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
/DHM/		KUHN, P., Stechele W., <i>Complexity Analysis of the Emerging MPEG-4 Standard as a Basis for VLSI Implementation</i> , vol. SPIE 3309 Visual Communications and Image Processing, San Jose, Jan.1998, pp. 498-509.	
/DHM/		LEE, Liang-Wei, Jhing-Fa Wang, Jau- Yien Lee, Jung-Dar Shie, <i>Dynamic Search-Window Adjustment and Interlaced Search Block-Matching Algorithm</i> , IEEE Transactions on circuits and systems for video technology, Vol. 3, No. 1, Feb. 1993, pp. 85-87.	
/DHM/		LEE, W., Y. Kim, R.J. Gove, C.J. Read, <i>Media Station 5000: Integrating Video and Audio</i> , IEEE Multimedia, Vol. 1, No. 4, 1994, pp. 50-61.	
/DHM/		LEE, Xiaobing, Ya-Qin Zhang, <i>A Fast Hierarchical Motion-Compensation Scheme for Video Coding Using Block-Feature Matching</i> , IEEE Transactions on Circuits and Systems for Video Technology, Vol. 6, No. 6, Dec. 1996, pp. 627-635.	
/DHM/		LENGWEHASATIT, Krisda, et al., <i>A Novel Computationally Scalable Algorithm for Motion Estimation</i> , SPIE 3309 VCIP Visual Communications and Image processing, San Jose, CA, Jan. 1998, pp. 66-79.	
/DHM/		LI, R., B. Zeng, M.L. Liu, <i>A New Three-Step Search Algorithm for Block Motion Estimation</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 4, No. 4, Aug. 1994, pp. 438-442.	
/DHM/		LI, W., E. Salari, <i>Successive Elimination Algorithm for Motion Estimation</i> , IEEE Trans. Image Processing, Vol. 4, Jan. 1995, pp. 105-107.	
/DHM/		LIANG, Jie, et al., <i>Region-Based Video Coding with Embedded Zero-Trees</i> , 1068-0314/97, IEEE, 1997, p. 449.	
/DHM/		LIU, B., A. Zaccarin, <i>New Fast Algorithms for the Estimation of Block Motion Vectors</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol.3, No.2, April 1993, pp. 148-157.	
/DHM/		LIU, Lurng-Kuo, Ephraim Feig, <i>A Block-Based Gradient Descent Search Algorithm for Block-Based Motion Estimation in Video Coding</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 6, No. 4, Aug. 1996, pp. 419-422.	

Examiner Signature	/David Malzahn/	Date Considered	06/26/2007
--------------------	-----------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-8199 (1-800-786-8199) and select option 2.

Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/611,379
				Filing Date	06/30/2003
				First Named Inventor:	Buxton, et al.
				Art Unit	2193
				Examiner Name	David H. Malzahn
Sheet	6	of	8	Attorney Docket Number	42P15761
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
/DHM/		MO, Hyeon-Cheol, et al., <i>A High-Speed Pattern Decoder in MPEG-4 Padding Block Hardware Accelerator</i> , 0-7803-6685-9/01, IEEE, 2001, pp. II-197 – II-200.			
/DHM/		MOSCHETTI, F., et al., <i>About Macroblock Subsampling for Motion Estimation on IA-64</i> , Proc. of 2001 IEEE Int'l. Conf. on Multimedia and Expo (ICME 2001), Tokyo, Japan, August 2001, 4 pp.			
/DHM/		MOSCHETTI, F., et al., <i>A Fast Block Matching for SIMD Processors Using Subsampling</i> , IEEE #0-7803-5482-6/99, pp. IV-321 – IV-324.			
/DHM/		NAM, Kwon Moon, Joon-Seek Kim, Rae-Hong Park, Young Serk Shim, <i>A Fast Hierarchical Motion Vector Estimation Algorithm Using Mean Pyramid</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 5, No. 4, Aug. 1995, pp. 344-351.			
/DHM/		NETRAVALI, A., B. Haskell, <i>Digital Pictures Representation and Compression</i> , New York, Plenum, 1988, pp. cover-xv, 334-340, 537-542, and 354-355.			
/DHM/		PIRSCH, Peter, Nicolas Demassieux, Winfried Gehrke, <i>VLSI Architectures for Video Compression - A Survey</i> , Proceedings of the IEEE, Vol. 83, No. 2, Feb. 1995, pp. 220-246.			
/DHM/		PO, Lai-Man, Wing-Chung Ma. <i>A Novel Four-Step Search Algorithm for Fast Blockmatching</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 6, No. 3, Jun. 1996, pp. 313-317.			
/DHM/		PURI, A., H.M. Hang, D.L. Schilling, <i>An Efficient Blockmatching Algorithm for Motion Compensated Coding</i> , Proc. IEEE ICASSP, 1987, pp. 2.4.1-2.5.4.4.			
/DHM/		RAGSDALE, Gary L., et al, <i>Relationships of Popular Transmission Characteristics to Perceived Quality for Digital Video Over ATM</i> , National Communications System, Technical Information Bulletin 99-2, January 1999, 64 pp.			
/DHM/		RAMKISHOR, K., et al., <i>Real Time Implementation of MPEG-4 Video Decoder on ARM7TDMI</i> , Proc. of 2001 Int'l. Symposium on Intelligent Multimedia, Video and Speech Processing, May 2-4, 2001, pp. 522-526.			
/DHM/		SHI, Y.Q., X. Xia, <i>A Thresholding Multiresolution Block Matching Algorithm</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. 7, No. 2, April 1997, pp. 437-440.			

Examiner Signature	/David Malzahn/	Date Considered	06/26/2007
--------------------	-----------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-0199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/611,379
				Filing Date	06/30/2003
				First Named Inventor:	Buxton, et al.
				Art Unit	2193
				Examiner Name	David H. Malzahn
Sheet	7	of	8	Attorney Docket Number	42P15761
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ²
/DHM/		SIKORA, Thomas, <i>MPEG Digital Video Coding Standards</i> , Preprint from Digital Consumer Electronics Handbook, 1 st Ed., McGraw-Hill Book Co., Ch. 9, pp. 1-43. <i>Sept. 1997</i>			
/DHM/		SIKORA, Thomas, <i>MPEG-1 and MPEG-2 Digital Video Coding Standards</i> , Preprint from Digital Consumer Electronics Handbook, 1 st Ed., McGraw-Hill Book Co., pp. 1-43. <i>Sept. 1997</i>			
/DHM/		SIKORA, Thomas, <i>The Structure of the MPEG-4 Video Coding Algorithm</i> , Preprint from Digital Consumer Electronics Handbook, 1 st Ed., McGraw-Hill Book Co., pp. 1-16. <i>June 1996</i>			
/DHM/		SONG, Byung Cheol, Jong Beom Ra, <i>A Hierarchical Block Matching Algorithm Using Partial Distortion Criteria</i> , SPIE 3309 VCIP Visual Communications and Image Processing, 1998, San Jose, CA, pp. 88-95.			
/DHM/		SRINIVASAN, Ram and K.R. Rao, <i>Predictive Coding Based on Efficient Motion Estimation</i> , IEEE Transactions on Circuits and Systems on Video Technology, Vol. Com-33, No. 8, Aug. 1985, pp. 888-896.			
/DHM/		STOLBERG, H.-J., et al., <i>The M-Pire MPEG-4 Codec DSP and Its Macroblock Engine</i> , 0-7803-548206/99, IEEE, 2000, pp. II-192-II-195.			
/DHM/		THAM, Jo Yew, et al., <i>Transactions Letters: A Novel Unrestricted Center-Biased Diamond Search Algorithm for Block Motion Estimation</i> , IEEE, 1051-8215/98, 1998, pp. 369-377.			
/DHM/		van der SCHAAR, M., et al., <i>Near-Lossless Complexity-Scalable Embedded Compression Algorithm for Cost Reduction in DTV Receivers</i> , 0098 3063/00, IEEE, 2000, pp. 923-933.			
/DHM/		WANG, Chung-Neng, et al., <i>Improved MPEG-4 Visual Texture Coding Using Double Transform Coding</i> , 0-7803-6685-9/01, IEEE, 2001, pp. V-227 - V-230.			
/DHM/		WESTERINK, P. H., et al., <i>Two-Pass MPEG02 Variable-Bit-Rate Encoding</i> , IBM J. Res. Develop, Vol. 43, No. 4, July 1999, pp. 471-488.			

Examiner Signature	/David Malzahn/	Date Considered	06/26/2007
--------------------	-----------------	-----------------	------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.
 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.
 If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-8199) and select option 2.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number	10/611,379
Filing Date	06/30/2003
First Named Inventor:	Buxton, et al.
Art Unit	2193
Examiner Name	David H. Malzahn
Attorney Docket Number	42P15761

Sheet	8	of	8
-------	---	----	---

Examiner
Initials*Cite
No¹

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published

 T^2

/DHM/

WITTENBURG, J.P., et al., *HiPAR-DSP: A Parallel VLIW RISC Processor for Real Time Image Processing Applications*, (0-7803-4229-1/97) IEEE, 1997, pp. 155-162.

/DHM/

XU, Jie-Bin, Lai-man Po, and Chok-Kwan Cheung, *A New Prediction Model Search Algorithm for Fast Block Motion Estimation*, IEEE Int. Conf. Image Processing, ICIP97, Santa Barbara, 1997.

/DHM/

YU, Fengqi and Alan N. Willson, Jr., *A Flexible Hardware-Oriented Fast Algorithm for Motion Estimation*, ICASSP97, 1997, pp. 2681ff.

· /DHÌM/

ZHU, Shan, Kai-Kuang Ma, *A New Diamond Search Algorithm for Fast Block Matching*, IEEE Transactions on Circuits and Systems on Video Technology, Vol. 9, No. 2, Feb. 2000, pp. 287-290.

/David Malzahn/

06/26/2007